The housing section was prepared by Dr. Sarah L. Stafford, College of William and Mary, in May 2018 which was commissioned by the Williamsburg Area Association of Realtors. The full report is attached as Appendix ****

Current Housing Stock

In 1990, according to the U.S. Census, there were just under 12,000 residents in the City of Williamsburg occupying 3,960 housing units. 1 By 2000, the number of housing units decreased slightly to 3,880. However, by 2010, the number had grown to a total of 5,176 units which represents about a 30 percent increase. According to the most recent data from the 2012-2016 American Community Survey (ACS), the city now encompasses a total of 5,078 housing units and just under 15,000 residents.² During this same time period, the overall housing stock in the U.S. increased by a similar amount. Across the state of Virginia, housing growth was somewhat higher, at around 38 percent. In contrast, the other two Historic Triangle areas, James City County and York County, have experienced significantly higher growth over this same period, with York growing almost 80 percent to just over 27,000 units and James City County growing 120 percent to almost 32,000 units. Of course, Williamsburg has a significantly smaller area than its two neighbors as well as a much lower percentage of undeveloped land.



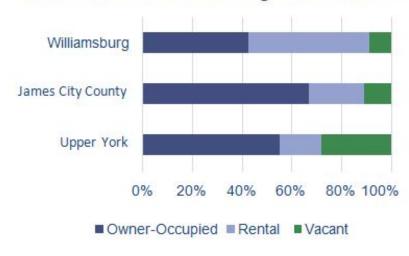


¹ Group quarters such as college dorms or nursing homes are not considered to be housing units, although the individuals who reside in them are considered residents of the city.

² Appendix A describes the various datasets used in this housing assessment and discusses their limitations and comparability.

In the census, housing units are classified based on whether they are occupied by their owners or are rented to non-owners. The percentage of rental units in the city has decreased slightly from 1990 when the rental rate was about 56 percent to just under 50 percent for the current housing stock as estimated by the 2012-2016 ACS. The owner-occupancy rate has increased from 32 percent in the 1990 census to 42 percent in the 2012-2016 ACS. Given the increase in the number of housing units, both categories of housing saw an absolute increase in the number of units from 1.262 owner-occupied units in 1990 to 2,157 and from 2,206 rental units in 1990 to 2,470. The number of vacant units has varied over the years but is now at 451 units, representing about 9 percent of the total housing stock. While the percentage of vacant units in the city is similar to the state and national percentage (10 percent and 12 percent respectively), ownership is much less common in the city compared to the current Virginia rate of 59 percent owners and the national rate of 56 percent. This is reflected in the relatively high percentage of renters in the city, 50 percent, compared to Virginia and national rates of 31 and 32 percent respectively. Comparing Williamsburg to James City County and the upper York County, Williamsburg has a smaller percentage of owneroccupied units and a much larger percentage of rental units.³ The city also has a smaller inventory of vacant units. Of course, the city has an overall smaller housing stock – just over 5,000 units compared to over 6,000 units in Upper York and almost 32,000 units in James City County.

Williamsburg has a lower percentage of owners than the surrounding communities...



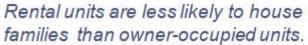
³ Upper York is the part of the county that lies north of Route 238 and is separated from Lower York by Camp Peary, Cheatham Annex, and the Yorktown Naval Weapons Station.

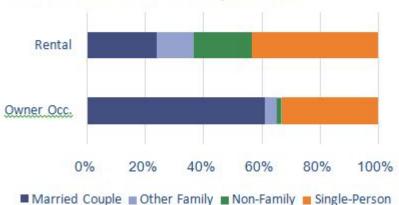
Perhaps a better comparison is to other cities in Virginia that also are the home of colleges and universities. Many of Williamsburg's homes house students attending William and Mary, most of whom rent rather than buy a home since they will only plan to live in the area while they are in school. Both Lynchburg and Lexington have about 40 percent rental units, while in both Harrisonburg and Charlottesville over half of the housing stock is rented. Although not all of Williamsburg's rentals are occupied by students, the city's relatively higher percentage of renters is obviously due to the presence of William and Mary. In a later section of this report, we focus more directly on the impact of students on the Williamsburg housing market.

...but it looks similar to other college towns.



Housing units are occupied by what the Census Bureau terms "households." Households range from single-person households, that is an individual living alone, to family households, including extended-family and intergenerational households, to non-family households. For the purposes of collecting information about the occupants in a household, the selfselected "head" of the household is asked to provide more information to the Census Bureau. In most families, the head of the household is one of the older adults in the family, although it is not clear in extendedfamily households or in non-family households exactly who the head of the household is. According to the 2012-2016 ACS, overall, about half of all units are occupied by family households and half occupied by non-family households (including single-person households). However, the type of household varies significantly across rental and owner-occupied units. Less than 40 percent of rental households are family units. The majority of rental households, over 40 percent, are single-person households. The final 20 percent of rental households are multi-person households where there is no formal family relationship.

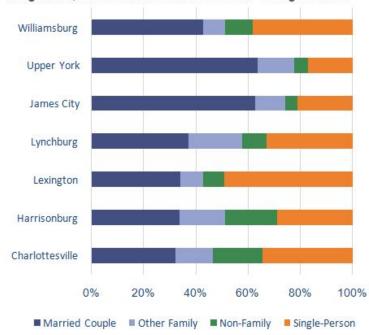




In contrast, there are very few non-family households in owner-occupied units. Over 60 percent of occupied units have married couple families in them, with an additional four percent in other types of family households such as single-parent families. The final third of owner-occupied units host single-person households.

Although Williamsburg stands out from the two other Historic Triangle localities with respect to the proportion of single-person and non-family households, once again its distribution of household types is more consistent with the profile of other college locations.

Williamsburg has fewer family households than its neighbors, but about the same as other college towns.

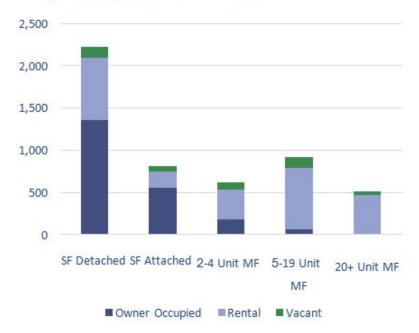


While Upper York County has just over 20 percent non-family and single-person households and James City County has about 25 percent, Lynchburg has just over 40 percent, only slightly below that of Williamsburg. However, in Lexington, Harrisonburg, and Charlottesville – over 50 percent of households are single-person or non-family households.

Another important characteristic of a locality's housing stock is the type of housing units it includes. For Census purposes, housing units are classified as single-family or multi-family. Single-family includes both detached homes as well as some attached homes. The difference between single-family attached homes and multi-family housing units is the nature of the physical separation between the units and the separation of mechanical systems. Single-family attached units cannot have other units above or below them and must have their own heating system and utility meters. Thus, a detached home with a ground floor apartment is a multi-family home while a row house is a single-family attached unit. Based on the 2012-2016 ACS, around 60 percent of the housing units in the city are singlefamily homes, 44 percent are detached and 16 percent are attached homes. Close to two-thirds of these single-family homes are owner-occupied. Of the multifamily properties, the smaller properties with only 2 to 4 units represent about 12 percent of the total housing stock.

Only 30 percent of the units in these smaller multifamily properties are owner-occupied. The larger multifamily properties, those with more than 5 units per property, represent the final 28 percent of the housing stock. Almost all of these properties, just over 95 percent, are occupied by renters. Both James City County and Upper York County have a slightly higher percentage of single-family homes than Williamsburg. In both localities, two-thirds of the housing is single-family detached homes. In James City, an additional 13 percent are single-family attached homes, with 16 percent multi-family units and 4 percent mobile homes.

Housing in Williamsburg is predominantly single-family, detached homes.



In Upper York, single-family attached homes make up about 6 percent of the remaining stock with multi-family units representing 26 percent and mobile homes only 1 percent. Given that renters are more likely to live in multi-family units and Williamsburg has a higher percentage of renters than its neighbors, these differences in the housing stock make sense.

Another key characteristic of the housing stock is the size of the housing units. The census measures size by counting the number of bedrooms. According to the 2012-2016 ACS, in the city about one-third of the housing consists of two-bedroom units and another third consists of three-bedroom units.

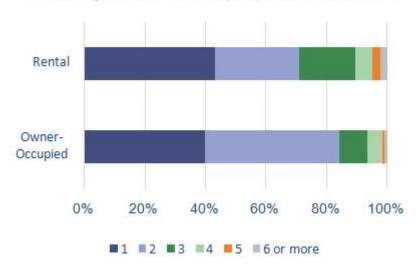
Rental homes are generally smaller than owner-occupied.



There is a difference in size across rental and homes occupied by owners. Rentals are most likely to have only two-bedrooms, while owner-occupied homes are more likely to have three. Almost no owner-occupied homes have just one-bedroom while studios and one-bedroom units represent more than 20 percent of rentals. Overall, studios represent about 3 percent of the total housing stock and one-bedroom units represent 12 percent. Four and five-bedroom units represent 15 and 3 percent of the total units, respectively. Most of these larger homes are owner-occupied.

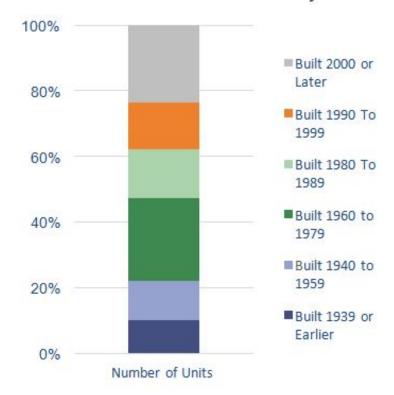
In Williamsburg, over 40 percent of all households consist of only one person and another 30 percent of households have just two people. In contrast, less than half of all houses have two or fewer bedrooms. The size distribution of households across renters and owners is not that dissimilar, although rental houses have a slightly larger proportion of three person or larger households than owner-occupied houses. However, while owner-occupied homes house slightly fewer individuals on average, they tend to be significantly larger than rental homes. Relative to its neighbors. Williamsburg has smaller households. In James City County, the big difference is in the number of single-person households, 25 percent rather than Williamsburg's 40 percent. Upper York County has fewer one-person and two-people households - combined they account for just over 50 percent of the total compared to Williamsburg's 70 percent.

On average, there are two people in each house.



The age of the housing stock is another important characteristic. According to the 2012-2016 ACS, the median vintage of housing units in Williamsburg is 1982. Just over 20 percent of the units in the city were built after 2000, about the same percentage of units that were built before 1960. About 30 percent were built between 2000 and 1980 and a guarter were built between 1980 and 1960. The rental housing stock is generally older than the owner-occupied stock, with a median age of 1976 for the former and a median age of 1989 for the later. The housing stock in the city is also much older than that of James City County which has a median vintage of 1993 or Upper York which has a median vintage of 1990. However, the age of the city's housing stock very closely mirrors the age of the housing stock in Virginia overall which has a median vintage on 1981. Both the city and Virginia have a slightly newer housing stock than the overall U.S. housing stock which has a median vintage of 1977.

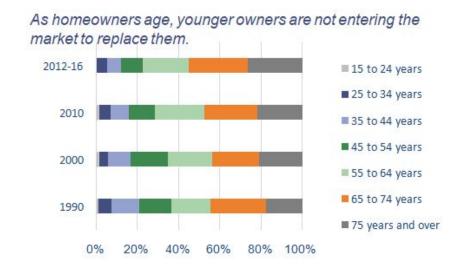
Over two-thirds of the homes in the city have been here for more than 40 years.



Owner-Occupied Homes

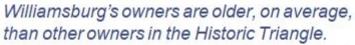
According to the 2012-2016 ACS there are 2,157 owner-occupied housing units in the City of Williamsburg. In addition, there are 380 vacant units for sale that could become owner-occupied for a total of 2,537 units. This represents almost half of the total housing units counted in the city. Note that this count does not include homes that were built after 2016, including the new homes located in Quarterpath at Williamsburg and Capitol Landing Green on Capitol Landing Road. As discussed in the previous chapter, over 90 percent of owner-occupied units are single family homes — about 1,350 detached homes and 550 attached homes. The remaining homes are in multi-family arrangement, which would include detached homes with basement or in-law apartments.

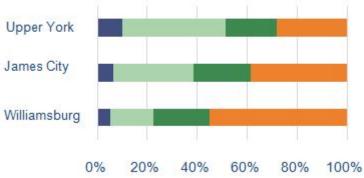
Since 1990, the number of owner-occupied households in the city has increased by about 70 percent from 1,262 to 2,157. However, this increase has not been distributed equally across all age groups. Over the past several decades, the average age of homeowners in Williamsburg has steadily increased.



The percentage of homeowners under the age of 45 decreased from 21 percent to 12 percent, as has the absolute number of owners under 45. While the number of owners in the 45 to 55 age group has grown absolutely, their percentage of the total has decreased from 16 percent to 11 percent. For both the 55 to 64 and the 65 to 74 age groups, both the absolute and relative numbers of homeowners have grown. The real growth has been in the 75+ age group which has grown from 18 percent of the total in 1990 to 26 percent currently.

This increase in the age of owners is consistent with state and national trends as younger adults are less likely to own homes due both to lifestyle choices and to financial conditions.

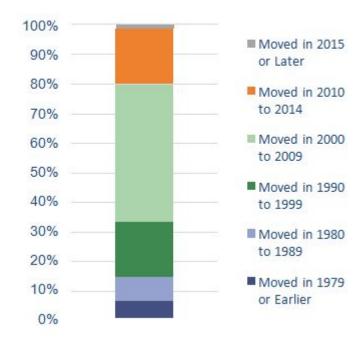




James City County has experienced the same phenomenon, with a decrease in the percentage of homeowners below 45 and an increase in the percentage of homeowners 55 and up. However, Williamsburg continues to have the oldest population of homeowners compared to its neighbors. While 55 percent of Williamsburg's homeowners are 65 or older, only 40 percent of homeowners in James City County and 30 percent of homeowners in Upper York County are that old.

According to the 2012-2016 ACS, one third of homeowners in Williamsburg, or around 720 households, purchased their current homes before 2000. Another 45 percent moved into their homes between 2000 and 2009 and 20 percent bought their homes between 2010 and the present.

Most Williamsburg homeowners have been in their homes for less than two decades.

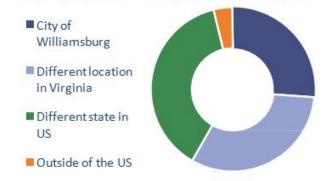


Note that since the total number of housing units in Williamsburg has not changed significantly since 2000, these newer owners primarily represent turnover of existing homes rather than purchases of new homes. Compared to James City County, Williamsburg owners have a longer tenure, as over 70 percent of owners in James City purchased their homes in 2000 or later. However, Upper York owners have been in residence longer, with only 60 percent having purchased post-1999. Statewide the percentage of owners purchasing in 2000 or later is 60 percent as well.

The 20 percent of homeowners that bought their home in 2010 or later includes both newcomers to the area as well as households that moved within the city. While we do not have complete data on the previous residence of individuals buying homes in the city, the ACS does ask people who moved into the area where they lived previously. Thus we can get a good sense of which areas are supplying new homeowners in Williamsburg. During the 2012-2016 period, just over a quarter of individuals that bought in the city moved from a different location in the city, which they may or may not have owned. About a third moved from within Virginia but from somewhere other than Williamsburg.

Just under 40 percent of buyers came from another U.S. state, with only about 4 percent of owners moving from somewhere outside of the United States.



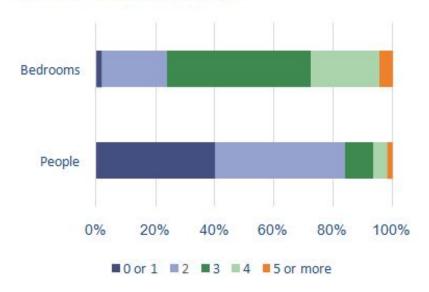


The neighboring localities have a similar low percentage of owners moving from outside the US. However, James City County has a much higher percentage of Virginians purchasing homes at 66 percent while Upper York has a lower percentage, only 48 percent, which could be due to the number of military bases in York County.

⁴ The ACS counts the number of people moving, not the number of households.

Using data from the 2012-2016 ACS, we compared the size of houses based on the number of bedrooms to the size of households. Note that there are very few homes with only one or no bedrooms, even though 40 percent of the households only have one person in them. In fact, over 80 percent of all owner-occupied homes have two or fewer occupants even though just over 20 percent of all houses have two or fewer bedrooms.

Owner-occupied houses are much larger than the households that live in them.



Of course, many households may want additional bedrooms for visitors. In particular, older householders may purchase large homes to accommodate adult children and grandchildren. However, it could also be an indicator that the existing housing stock and the current population of owners are somewhat mismatched.

The 2012-2016 ACS provides estimates of the value of the owner-occupied housing stock. In Williamsburg, the median owner-occupied home is worth \$319,500. This is very similar to the median house value in both James City County and Upper York which are \$318,700 and \$314,400 respectively. Just around seven percent of homes in the city are valued at less than \$150,000.

Over half of the owner-occupied homes in Williamsburg are worth more than \$300,000.



About 40 percent of the homes are in the \$150,000 to \$300,000 range and 18 percent are in the \$300,000 to \$500.000 range. The remaining 35 percent of homes are worth more \$500,000 or more. Both James City County and Upper York have similar proportions of homes under \$300,000. However, both of those areas have a higher percentage of homes in the \$300,000 to \$500,000 range, 34 and 43 percent respectively. In comparison to its neighbors, Williamsburg has a higher percentage of homes in the \$500,000 and higher range. The housing stock in Williamsburg is also more valuable on average than that of Virginia or the U.S. overall. The 2012-2016 ACS estimates that the median value of owner-occupied homes in Virginia is \$248,400 while the U.S. as a whole has a median value of \$184,700.

While the Census Bureau does not collect data on the sales prices of homes, the Williamsburg Multiple Listing Service (MLS), run by the Williamsburg Area Association of Realtors, does track housing sales in the area. Like other areas in the country, Williamsburg housing sales suffered during the 2008 housing crisis. However, starting in 2010 home sales began to recover and have generally continued to grow since then. While the number of sales per year hovered around 80

during the early part of the decade, current sales numbers are about twice that. While the number of sales in the city has increased over time, home prices have not seen a similar increase.



The median price of homes sold in the city has ranged from \$250,000 to around \$300,000 while the average price has generally stayed between \$300,000 and \$350,000.

⁵ Williamsburg MLS data contains information on all home sales that are listed by brokers that participate in the MLS service in the area. Sales that are made by private parties, such as sales by owners, are usually not listed in the MLS.

When one controls for differences in the size of homes sold, the pattern is similar, with median and prices per square foot ranging between \$135 and \$145 and average prices staying between \$140 and \$150. It is also interesting to compare sales prices in the city to prices in the neighboring jurisdictions. Over this time period the average price for a home in Williamsburg was just under \$320,000 while the average price in James City County was just over \$340,000. However, the average price per square was \$144 in the city and \$140 in James City County. Thus, on average, the homes sold in James City County are larger than those sold in Williamsburg but are priced somewhat lower than a comparably-sized home in the city. Homes in Upper York are both less expensive on average and less expensive per square foot – the average sales price in Upper York is around \$220,000 and the average price per square foot is only \$125.

In 2017, just over half of the homes sold in Williamsburg were single-family homes, most of which were detached homes. Single-family detached homes tend to be more expensive than single-family attached homes both overall and per square foot. However, the median attached home was on the market for less than a month.

Detached single-family homes sell for the highest prices, but attached single-family homes and condominiums sell the fastest.

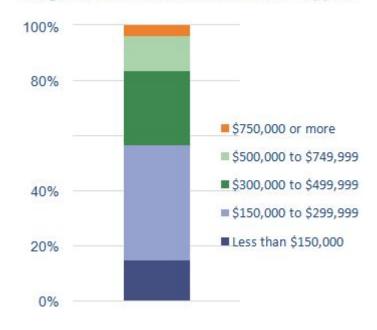
Type of House	Number of Sales	Median Price	Median Finished Sq. Ft.	Median Price per Sq. Ft.	Median Days on Market
Detached SF	73	\$378,000	2,492	\$159	53
Attached SF	9	\$199,000	1,565	\$131	28
Townhouse	36	\$270,000	1,969	\$131	84
Condominium	36	\$176,500	1,429	\$122	27

In contrast, the median detached home took over 50 days to sell. Thus, the market for attached single-family homes in the city is quite strong. The market for condominiums, which are priced and sized similarly to attached single-family homes, is also quite strong as these units also spend less than a month on the market. Townhomes, whose median price and size falls in between that of condo/attached homes and single-family detached homes, spend the longest time on the market - a median of just under three months - suggesting a weaker market for them.

During 2010 to 2017, the minimum sales price for a home listed on the MLS in the City of Williamsburg was \$51,500 and the maximum was \$1,75 million. In 2017, prices ranged from a low of \$76,000 to a high of \$1.6 million. Looking at the distribution of sales prices in 2017, the majority were under \$300,000 with 15 percent in the under \$150,000 range and an additional 42 percent in the \$150,000 to \$300,000 range. Homes in the \$300,000 to \$500,000 range represent 27 percent of the total while homes in the upper two ranges, \$500,000 to \$750,000 represent 13 and 4 percent, respectively. Comparing this to the values of owner-occupied housing stock overall, there is a much higher percentage of sales in the under \$150,000 range than in the existing stock - 15 percent of sales are in this range while only 8 percent of the housing is in this range. Conversely, while over 40 percent of homes are worth \$500,000 or more, only 17 percent of sales are for more than \$500,000. In the \$150,000 to \$300,000 and the \$300,000 to \$500,000 ranges the percentage of sales is almost the same as the percentage of owner-occupied homes. Given such a wide range of prices for home sales, it is not surprising that the square footage of the homes sold ranges from 780 to 6,700 with an average of 2,090. In terms of the number of bedrooms, very few houses

have only one-bedroom or 5 or more bedrooms. The most common type of home is a 3-bedroom home, representing about 45 percent of the sales. Two and four-bedroom houses each represent about a quarter of the market. The distribution of the number of bedrooms in the houses sold in 2017 is very similar to the distribution of bedrooms in the overall housing stock in the city.

In 2017, more homes in the lower price ranges were sold than homes in the upper.



Rental Homes

According to the 2012-2016 ACS, there are 2,470 rented housing units in Williamsburg as well as 71 vacant units for rent for a total of 2,541 units. This represents almost exactly half of the total housing units in the city. Note that this count does not include rental units that were added after 2016, such as the converted Flats of Williamsburg on York Street and Aura at Quarterpath.

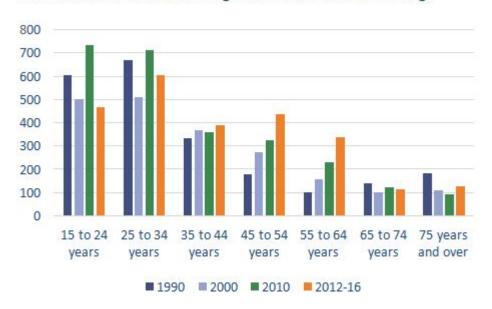
Williamsburg's rental stock has not seen as much growth as the overall housing stock.



While there have been some fluctuations in the number of rentals over times – with a low of just over 2,000 units reported in the 2000 census – the number of units available for rent currently is quite similar to the number available in 1990. At the same time, the overall number of housing units has increased, resulting in a decrease in the percentage of homes in the city that are occupied by renters from over 55 percent in 1990 to the current rate of 50 percent. Over this time, the percentage of renters in both James City County and York has stayed roughly the same at about onequarter of all occupied units, which is significantly lower than Williamsburg's rental rate. Rental rates in Virginia are currently at about 34 percent and for the overall U.S. the percentage of rental is about 38 percent.

While the absolute number of households that rent in the city increased slightly over the last twenty-five years, growth has not been consistent across age categories. Rentals among people aged 15 to 24 are currently lower than they were in 1990. While the number of renters in the 35 to 44 year age group has grown modestly over time, renters in both the 45 to 54 and the 55 to 64 age groups have grown more robustly.

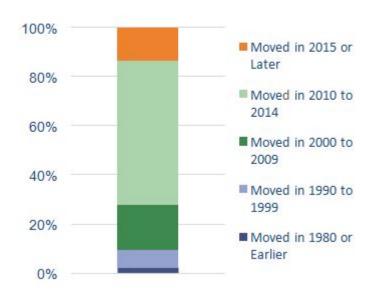
The number of middle-aged renters is increasing.



Finally, in both the 65 to 74 and 75 and older groups, the number of renters has decreased slightly. Even with these changes the average age of renters has stayed about the same, around 40. Upper York County renters are of a similar average age while James City County renters are significantly older with an average age of 50.

According to the 2012-2016 ACS, just under 10 percent of rental households have been in their units since 1999 or earlier and an additional 18 percent moved in between 2000 and 2009. About 60 percent of rental households moved into their units between 2010 and 2014.

Most renters have been in their homes for less than five years.

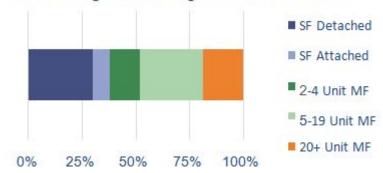


The remaining 14 percent of householders moved into their units in 2015 or later. Of the renters that moved within the last year, less than 20 percent moved from another location in Williamsburg. Just under 60 percent moved from another location in Virginia, and over 20 percent moved from another state in the U.S. with only a small percentage (three percent) from abroad.

These rental patterns are similar to those of James City County where just over 70 percent of renters moved into the county in 2010 or later. However in the James City, about one-third of renters moved from within the county with an additional third moving from other locations in Virginia. Upper York renters are even shorter term, with over 80 percent moving in 2010 or later. They are also coming from more distant locations, with over 60 percent moving from somewhere outside of Virginia.

The ACS reports that about thirty percent of the rental units are single-family detached houses and an additional 8 percent are single-family attached homes. Just under 15 percent of rental units are in small multifamily structures with 2 to 4 units.

A wide range of housing is available for rent.



The most common type of multi-family rental are rentals in medium-sized structures, i.e., those with between 5 and 19 units which represent 30 percent of the rental units. The final 20 percent of rentals are in large multi-family structures with 20 or more units.

Comparing rental households to the size of rental units, as reported in the 2012- 2016 ACS, the size of rental households in the city is very closely matched to the size of rental units with typically one person to a bedroom. This is in contrast to owner-occupied units, where households are much smaller than their houses.

Rental households and units are evenly matched.



Of course, one might expect a better matchup for rentals since it is easy to change the size of a rental if the household changes.

According to the 2000 Census, the median gross rent (which includes monthly utilities) for the city of Williamsburg was \$616. In the 2012-2016 ACS, the median estimated gross rent is \$1,093. If median gross rent had increased exactly at the rate of inflation, in 2013 it would have been only \$854. The median rent may have increased by more than the inflation rate because of a change in the types of rental housing available such as more upscale units. Alternatively, it

could also indicate an increase in demand relative to supply for certain types of rental units in the city. The current vacancy rate for rental units in Williamsburg is about 3 percent.⁶

Rents in the city have risen faster than inflation.



⁶ This estimate only includes vacant units that are identified as being available for rent, not vacant units that are for sale.

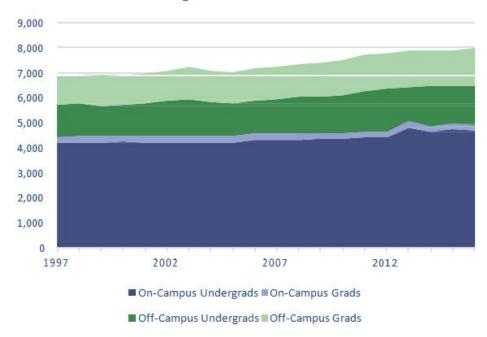
A vacancy rate of 5 percent is generally thought to be the "natural" vacancy rate for rentals, i.e., the vacancy rate that indicates a balance between housing supply and demand so a lower rate suggests demand is greater than supply. In particular, there is likely to be excess demand for units at the lower end of the scale. For example, between 2000 and now, units renting for less than \$800 decreased from over 80 percent of the inventory to less than 20 percent, while units renting for \$1,500 or more increased from less than 5 percent to over 20 percent.

The next section on student housing examines the impact that students are likely to have increased rents in the city in more detail. Rentals in James City County and Upper York are generally more expensive than those in Williamsburg, with James City County's median rent just over \$1,200 and Upper York's just over \$1,300. However, both of those localities have larger rentals on average compared to Williamsburg.

Student Housing

The College of William and Mary is one of the key institutions in the City of Williamsburg. In 2016, William and Mary had approximately 6,200 undergraduate and 1,800 graduate students the programs offered at the Williamsburg campus.

Housing Status of W&M Students

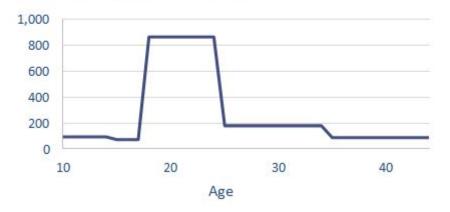


Around 4,900 students, primarily undergraduates, live on campus in student housing. The remaining 3,100 students, half of which are undergraduates and half of which are graduate students, live off-campus. While some may commute from outside of Williamsburg, a significant number of them do live in the city. Over the past two decades William and Mary has made efforts to house more students on campus. While the number of on-campus housing spaces has increased by about 500 beds since 1997, the total number of students has grown by around 1,400 students. This means an additional 900 students need off-campus housing. W&M's Real Estate Foundation did purchase the Days Inn motel on Richmond Road in 2017 to convert into a dorm with room for 150 to 180 students. However, the new space is intended to accommodate students who would otherwise be housed in the on-campus dorm, Landrum Hall, while it is being renovated. Since Landrum typically houses 220 students, this will result in a small decrease in on-campus housing for the 2017-2018 academic year. Once Landrum Hall is renovated. William and Mary has additional dorms that need repair. so it is not clear when or if the overall capacity of oncampus housing will increase.

Unfortunately, there is no direct way to determine how many W&M students live within the city boundaries as opposed to living in neighboring localities like James City County and Upper York. We can get a sense of the number of students by looking at the total number of 18 to 24 year old that live in the city. In theory, college students should be counted in the population of the place where they live while attending school, and not in the location where their parents live even if they are fully supported by their parents. However, there is some confusion about this, so that one might expect an undercount for the location where students live while attending school. Of course, the number of individuals in the 18 to 24 age range in the city will include individuals who are not attending W&M.

These could be individuals attending other local schools such as Thomas Nelson as well as working individuals. Additionally, a reasonable number of graduate students are likely to be older than 24 and not included in these estimates.

Based on population patterns, we estimate that around 5,370 of the 18-24 year olds living in Williamsburg are W&M students.



Nonetheless, it is interesting to look at the number of individuals in this age range, particularly compared to the number who are slightly younger or older. According to the 2012- 2016 ACS, there are about 700 individuals in the city that fall in the 10-17 age

range or an average of about 90 individuals of each age. In comparison, there are 6,000 individuals in the city between the ages of 18 and 24, for an average of almost 860 for each age. In the 24 to 34 age range there are about 1,800 individuals or about 180 on average for each age, but it is likely that a reasonable number of these individuals are graduate students.

Using this information to estimate the number of W&M students, we came up with a rough estimate of 5,370 students that are likely to reside in the city. If 4,900 of them live on campus, that leaves at least 470 students under the age of 24 living in the city of Williamsburg with an unknown number of older students – perhaps as many as 900 – living in the city as well.

 $^{^7}$ This estimate is based on the assumption that without W&M the number of individuals at each age between 18-24 would be roughly the same as the number of individuals at each age between 10-17. Without W&M we would expect 7*90 = 630 individuals to reside in the city, leaving 6,000 - 630 = 5,370 as W&M students.

⁸ If we apply similar logic to the expected number of non-student 25 to 34 year olds, we would expect around 90 individuals on average for each age given the number of individuals in the 35 to 44 age group (just under 900). Without W&M we would expect 10*90 = 900 individuals aged 25 to 34 to reside in the city, leaving 1,800 - 900 = 900 as W&M students.

The 2012-2016 ACS reports an average of 647 households in the city that are headed by someone in the 15-24 age group. Although the ACS does not tell us the number of individuals living in these households, the average size of rental households in the city is 2.6 which would equate to about 1,700 individuals in the 15-24 age group living in rental units in the city. While this is a slightly higher estimate than that obtained using the population numbers, it is well within the range one might expect given that the total number of students living off-campus is around 3,100.

The cost of on-campus housing varies somewhat depending on the particular dorm. In 2017, rent ranged from \$860 a month for a double to \$1,050 a month for a single, including utilities and internet access. These costs are slightly higher than the cost of most rental units near campus, even after accounting for typical utility and internet costs, assuming comparable accommodations (i.e., shared or single bedroom). However, students are only required to pay for their room during the academic year while most off-campus rentals require an annual lease. If students are not planning to live in Williamsburg over the summer, they may find it cheaper to live on campus. Otherwise, students generally pay less to live in off-campus

apartments than they do in on-campus housing. In addition to off-campus apartments, students can also rent off-campus houses. In the city, no more than three unrelated individuals can legally share a house unless the owner of the home has received special permission from the city to rent to four unrelated persons.

The presence of student renters increases the demand for rental housing in the city. This is likely to also increase the price of rentals in the city, particularly those near William and Mary. However, it is difficult to directly measure the impact of student renters on the price of rental housing. It is clear that on average housing near William and Mary is more expensive than housing in the Northeast area of Williamsburg. For example, as discussed in more detail in the Cross-City Comparison section of this report, the area surrounding William and Mary has a median rental rate of \$1,123 while the Northeast area of the city, which houses some of the larger apartment complexes, has a median rental rate of \$960.

⁹ This assumes that the householder is older than or around the same age as all other individuals living in the household, an assumption we find quite reasonable for households headed by individuals in the 15 to 24 age range.

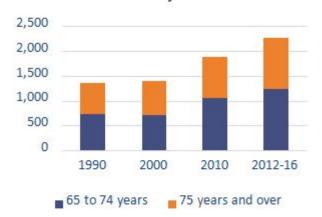
These patterns continue to hold when the controlling for the number of bedrooms in the unit. However, in the north-western area of the city, rental rates are higher than those in the area surrounding William and Mary, with a median rent of \$1,242.

One of the clearest impacts of students on the rental market is likely the type of rentals that are offered. For example, the area near William and Mary also has the largest number of larger rental units – four bedrooms or more. It also has several student-oriented complexes such as the City Lofts, a converted hotel development that caters to students with a communal lounge, laundry services, and all utilities included. For units with multiple bedrooms, the complex offers separate leases. A recent proposal approved by the City Council for a new 240 unit apartment complex at Midtown Row for up to 620 residents is also targeted to students with similar types of amenities.

Senior Housing

According to the 2012-2016 ACS, there are around 2,270 individuals in the City of Williamsburg who are 65 or older. This represents about 15 percent of the total residents of the city. Since 1990, there has been a significant increase both in the percentage of seniors and their absolute numbers.

The number of seniors in Williamsburg has increased steadily since 2000.

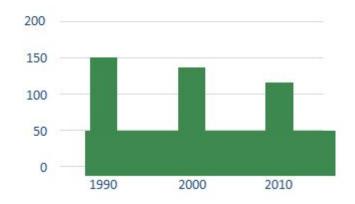


The current percentage of seniors is about the same as the percentage in Virginia and the U.S. overall, where seniors make up between 14 and 15 percent of the population, but it is much lower than the proportion of seniors in James City County which is around 23

percent and slightly below that of Upper York County which is about 16 percent. Seniors in Williamsburg are split roughly equally between residents in the 65 to 74 age range and residents who are 75 and older.

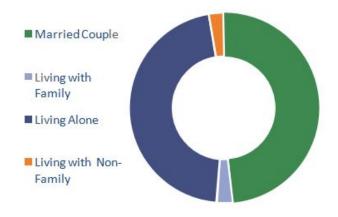
Currently most seniors in Williamsburg live independently, with only around 5 percent in nursing homes or other group living arrangements. This is a change from 1990 when when over 10 percent of the senior population lived in nursing homes. During this same period, the nursing home population in York County has remained relatively constant at just over 100 residents while the population in James City County has grown from less than 50 in 1990 to over 370 in 2010.

But nursing home numbers have dropped.



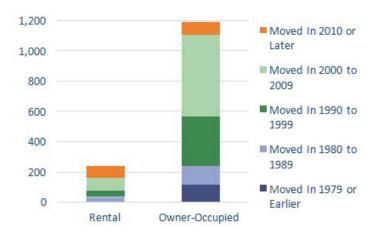
The roughly 2,050 seniors that live independently account for 1,426 household. Of these households, just under half are seniors living with their spouse. A small number of households, 3 percent, consist of seniors living with family members other than a spouse. A similar number of households consist of seniors living in non-family households. The remaining 46 percent of households are seniors living alone. Three-quarters of seniors live in single-family homes, both attached and detached. The remaining quarter are in multi-family structures, about half in structures with 2 to 4 units and the other half in structures with 5 or more units.

About half of seniors live with spouses and the other half live alone.



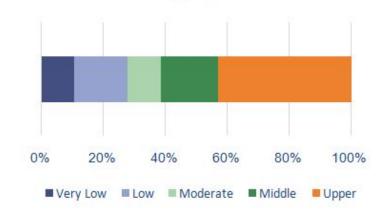
The majority of seniors living independently own their own home — just over 80 percent. The remaining households are in rental units. According to the 2012-2016 ACS, about 45 percent of these households moved into their homes between 2000 and 2009 and an additional 10 percent moved in 2010 or later. Just over 25 percent of households moved into their current homes from 1990 to 1999 and another 11 percent moved into their homes in the 1980s. The final 117 households, just about 8 percent of the total, have lived in their current home since before 1980. All of these individuals own their own homes and have lived in them for at least 36 years.

Senior households include both long-term residents and new-comers.



While many of these senior households are in the upper-income group with a household income of at least \$75,000 a year, over one in four are in the very low- (under \$20,000 a year) and low- (\$20,000 to \$35,000 a year) income groups. However, only a small percentage of seniors – about 7 percent of individuals – are estimated to be living below the poverty line. About 15 percent of the seniors 65 to 74 have a disability, while in the 75 or greater age group about a third have a disability. Overall this means that one in five seniors has a disability. However, only about 2 percent of seniors are both below the poverty level and have a disability.

Senior households include both those comfortably well-off and those struggling to make ends meet.



While the next section looks at housing affordability for the community overall, it is worthwhile to highlight the issue of housing affordability for seniors. Of the 1,426 senior households, according to the 2012-2016 ACS just over 30 percent are cost-burdened – that is, pay more than 30 percent of their income for housing. This is slightly less than the percentage of households overall that are cost-burdened, as discussed in more detail in the following section. This is not split equally between owners and renters. Only about a quarter of senior households that own their homes are cost-burdened compared to 60 percent of senior renters who are costburdened. Conditions are similar in James City County with about 30 percent of senior households costburdened. The estimate of cost-burdened senior households in Upper York County is much higher, over 50 percent.

Housing Affordability

A housing affordability analysis compares what it costs to live in a certain area with the income of both current and potential new residents to determine whether the existing housing in the area is affordable. Affordability analyses typically focus on whether particular income groups can afford housing in a community.

For this analysis, we use the income group definitions created by the Department of Housing and Urban Development (HUD) which are based on the Medium Family Income (MFI) for an area.

The Department of Housing and Urban Development defines the income groups to be used for housing affordability analyses.

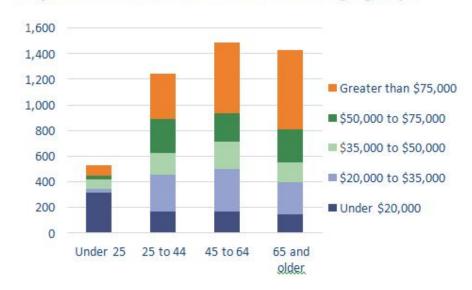
Income Category	HUD Income Range	HUD Income Band	Analysis Income Band	
Very low	< 30% MFI	Less than \$21,160	Less than \$20,0000	
Low	30% - 50% MFI	\$21,160 - \$35,270	\$20,000 - \$35,0000	
Moderate	50% - 70% MFI	\$35,270 - \$49,370	\$35,000 - \$50,0000	
Middle	70% - 100% MFI	\$49,730 - \$70,530	\$50,000 - \$75,0000	
Upper	> 100% MFI	More than \$70,530	More than \$75,0000	

Very low-income households have incomes that are less than 30 percent of the MFI while low-income groups have incomes between 30 and 50 percent of the MFI. In 2016, the MFI for the City of Williamsburg was \$70,533. Thus, within the city, the HUD very lowincome group includes households with a total annual income that is less than \$21,160 and the low-income group include those with an income between \$21,160 and \$35,267. Unfortunately, the data we have on household incomes from the Census and ACS do not allow us to determine how many households have incomes less than \$21,990 or \$36,550. Therefore, for this analysis we define a very low-income household to be one with an annual income of less than \$20,000 and a low-income household to be one with an income of \$20,000 to \$35,000. For our analysis, moderate-income households are those with income between \$35,000 and \$50,000, middle are those with income between \$50,000 and \$75,000, and upper are those with incomes greater than \$75,000.

As one might expect, the highest percentage of very low-income households are in the under 25 age group although very low-income households occur in all age groups. Overall in the City of Williamsburg there are just over 800 very low-income households which is

about 17 percent of all households. Of course, one might expect that most of the households in the under 25 age group are students. If we exclude the youngest age group from our totals, there are just under 490 very low-income households representing 12 percent of households headed by someone 25 or older.

Very low income households exist in all age groups.



An additional 890 households are in the low-income group representing just under 20 percent of households headed by someone 25 or older. Just over 30 percent of households headed by someone 25 or older are considered moderate- or middle- income, with the

remaining 37 percent considered upper-income according to HUD. Many of the very low-income households are likely to be living in poverty as the federal poverty threshold for a family of four in 2016 was \$24,250. However, the poverty level depends on the number of people in a household while the income groups do not. Thus, there are some very low-income households that are not living in poverty. Additionally, some low-income households might be below the poverty level, but many would not be.

Housing affordability is typically measured by computing the fraction of a household's income that must be expended to provide the household with housing. Housing is deemed to be affordable if the household spends 30 percent or less of their income on housing costs.

For renters, housing costs include rent and utilities and we can look at gross monthly rent to determine whether a rental unit is affordable. For those in the very low-income group, gross rent must be less than \$530 per month to be affordable and, depending on what a particular household's income is, the maximum affordable housing might be significantly less. For homeowners, housing costs include mortgage principal and interest, taxes, insurance and utilities. For each

income group we can determine the maximum affordable price for a home under certain assumptions. For example, for those in the very low-income group, only homes that cost less than \$87,800 are affordable.

Whether housing is considered affordable depends on a household's income.

Income Category	HUD Income Band	Maximum Monthly Housing Expense	Maximum House Price
Very Low	Less than \$21,160	\$530	\$87,800
Low	\$21,160 - \$35,270	\$880	\$146,300
Moderate	\$35,270 - \$49,370	\$1,230	\$204,800
Middle	\$49,730 - \$70,530	\$1,760	\$292,600
Upper	More than \$70,530	> \$1,760	>\$292,600

¹⁰ We assume a 30-year fixed rate loan with a 10% down payment at a 4.45% interest rate, homeowner's insurance at 0.45% of the home's value and property taxes at 0.054%.

To determine whether the existing housing stock in the City of Williamsburg is affordable for existing residents in the different income groups, we compare the number of households in each income group to the number of owner-occupied houses and rental units in the city that are below the maximum house value and gross rents for that income group. Since the ACS tracks monthly rents and housing values only for certain ranges, our ranges for rents and house values are also approximate.

For the very low-income group, the number of affordable rentals (less than \$500 per month) and owneroccupied housing units (less than \$100,000) is significantly less than the number of households. Thus, the majority of the households in this group are likely to be "cost-burdened" as they will have to spend more than 30 percent of their income on housing. While a reasonable number of these households are likely to be students supported by their parents, there are at least 300 non-student households in this category that are not receiving such support. The situation for households in the low-income group (between \$20,000 and \$35,000) is slightly better, as there are just about the same number of households in this group as there are affordable units (i.e., rents of \$500 to \$1000 a month and houses costing \$100,000 to \$150,000).

For lower income households, demand for affordable housing exceeds supply.



However, since the total demand for housing for households making less than \$35,000 is about 1,700 units and the supply is only about 1,200 units, overall a significant proportion of households in these two groups are cost-burdened. For the moderate- and middle-income groups (between \$35,000 to \$75,000), the stock of affordable housing is greater than the

demand, although some of this will also be taken by cost-burdened households in the lower income groups. Finally, while the stock of "affordable" housing for the upper income group may at first look to be insufficient, the total number of housing units is greater than the total number of households, so there is sufficient housing stock for households in this income group.

When one examines the 2012-2016 ACS data on the actual percentage of income that households report spending on housing, the cost burden is spread more widely than one might expect. Overall, just under 40 percent of all households, about 1,900, are cost-burdened and cost-burdened households exist in every income group. In the lower income groups there are more cost-burdened renters than owners, but as income increases, the proportion of cost-burdened households that own their home increases.

As a group, renters are slightly more likely to be costburden, with just over half of all renters reporting spending more than 30 percent of income on gross rent compared to a quarter of owners who report being costburdened. When one examines the percentage of households that are cost-burdened, as one would expect, the percentage decreases as incomes rise. In the very low-income group, 100 percent of households are cost-burdened and in the low-income group almost 80 percent are. These estimates include all households in the city, including those that receive government housing assistance.

Households are cost-burdened at all income levels.

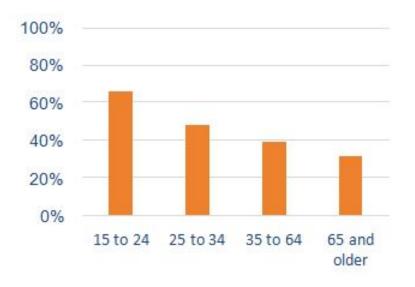


While housing assistance should relieve some of the cost-burden for those households that receive it, there is not enough meaningful housing assistance to meet needs and therefore a significant number of low-income households in the city are still struggling to pay for housing. Of course, these numbers also include students who often receive assistance from their parents or other sources of financial aid.

Interestingly, even in the moderate-income group (\$35,000 to \$50,000 annually) over half of households are cost-burdened and in the middle-income group (\$50,000 to \$75,000 annually) 30 percent are. In the upper-income group only about 3 percent of households are cost-burdened. Some households, particularly those in the middle- and upper-income group, may be voluntarily cost-burdened - that is, the household deliberately made a choice to spend more than 30 percent of their income on housing to obtain a higher standard of housing, particularly if they are first time-buyers who expect that their incomes will rise over time. Additionally, when considering these results, it is important to remember that the definition of costburden compares income to monthly housing costs. Thus, a household that has high wealth might appear to be cost-burdened even if it is not having trouble covering the cost of housing. For example, a household that has recently retired may have a relatively modest annual income but have money in savings that is used to pay housing costs.

As one might expect given entry-level wages and the fact that many of the younger households are likely to include college students, the younger the householder, the more likely it is to be cost-burdened, with over 60 percent of households headed by individuals 25 or younger spending more than 30 percent of their income on housing. Note, however, that even though the percent of households that are cost-burdened decreases as the age of the householder rises, 30 percent of seniors continue to face relatively high housing costs.

Younger households are more likely to be cost-burdened.



In addition to considering the reported burden associated with housing costs, another way to look at affordability is to analyze whether a typical first-time buyer can afford to buy a home in the city. According to the 2012-2016 ACS, the median income of a rental household in Williamsburg was \$34,800. Assuming that the renter is a first-time home-buyer and can pay no more than 30 percent of that income on housing, this translates into a monthly housing budget of \$870 a month including principal, interest, taxes, and insurance (PITI). This means that a renter with the median income could afford to purchase a home selling for no more than \$146,300.11 Since there are approximately 2,470 rental households in the city, this means that there are around 1.235 non-owner households in the county that have incomes below \$34,800 and can only afford houses that cost less than \$146,300. Even if many of these homes include students who are not looking to buy a home, there are at least 585 nonstudent households in this category. 12 According to the ACS, there are only 151 owner-occupied homes that are worth less than \$150,000. Of course, those homes already have owners. Looking at the MLS sales data for 2012-2017, only 107 homes that were sold went for \$150,000 or less representing about 15 percent of all homes that sold during that period. Thus, the supply of

affordable homes for first-time buyers is much lower than the likely demand for such homes.

The analysis above only includes people who currently live in the city. We also need to consider whether prospective residents would be able to find affordable housing in Williamsburg. To do this, we compare the median salary for various types of jobs in the area to assess whether the area is affordable for people in those occupations. According to the Virginia Employment Commission, in 2017, the median annual salary for a worker in the Greater Peninsula Area is \$37,200.¹³ Depending on the type of employment, median entry-level salaries are significantly lower. The level of housing that is affordable depends not only on the type of employment, but also whether there are household. or earners in that two one

¹¹ We assume a 30-year fixed rate loan with a 10% down payment at a 4.45% interest rate, homeowner's insurance at 0.45% of the home's value and property taxes at 0.054%.

We calculated this number by taking the total number of rental households with incomes below \$34,800 (1,235) and subtracted the total number of households headed by an individual in the 15 to 24 age range (650) to get this estimate.

The Greater Peninsula Area in includes, Williamsburg, James City County, Hampton, Newport News, Poquoson, and Gloucester.

A two-earner household where both earners received the median salary of \$37,200 would be able to afford almost \$2000 a month in rent or a home of just over \$300,000. The good news is that almost all rentals in the city are less than \$2000 a month. However, almost half of the homes on the market over the past five years have been for more than \$300,000 so that this household could have a difficult time finding a home to buy in Williamsburg.

Many local workers cannot afford to live in Williamsburg.

	Median Salary	One-Earner Household		Two-Earner Household	
Employment Sector		Max. Rent	Max. Home Price	Max. Rent	Max. Home Price
All	\$37,200	\$930	\$156,000	\$1,860	\$313,000
Community and Social					20.00
Services	\$31,100	\$780	\$131,000	\$1,560	\$262,000
Construction	\$29,900	\$750	\$126,000	\$1,500	\$247,000
Education	\$27,700	\$690	\$117,000	\$1,380	\$233,000
Office/Admin Support	\$22,900	\$570	\$96,000	\$1,140	\$233,000
Healthcare Support	\$20,100	\$500	\$85,000	\$1,000	\$169,000
Food Prep/Serving	\$17,100	\$420	\$72,000	\$840	\$144,000

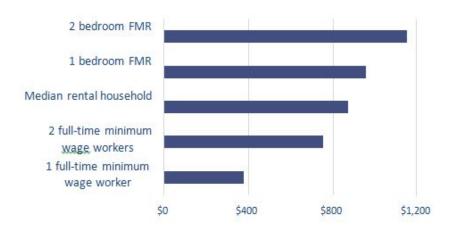
If there was only a single-wage earner in the family, the situation would be significantly more difficult, as only about 40 percent of rentals in the City cost under \$1,000 a month and only 15 percent of homes for sale in the last 5 years have been less than \$150,000. A household with two teachers earning the median salary of \$27,700 would be able to afford about three-quarters of the rentals in the city, but only about 40 percent of the homes offered for sale.

Another way to think about housing affordability is to calculate the hourly wage an individual must earn to afford the estimated "Fair Market Rent" (FMR) while spending no more than 30 percent of income on housing. The FMR is defined by HUD as the 40th percentile of gross rents for typical standard rental units in the area. FMRs are set by HUD on an annual basis, and the 2016 FMR for Williamsburg for a twobedroom unit was \$1,150 and \$953 for a onebedroom unit. The median rental household in the city of Williamsburg makes \$34,752. This includes both one and two-earner households. On that income, the household can afford to pay \$869 a month in rent which is less than the FMR for a one-bedroom rental. There is an even bigger gap between the FMR and the affordable rent for a household with two full-time minimum-wage workers who earn a total of \$30,160 a

year. In fact, for a household to be able to afford a twobedroom unit at FMR there would have to be the equivalent of 3 full-time minimum-wage workers in the household and for a one-bedroom unit there would have to be 2.5 full-time minimum wage workers.

If there was only one earner in the household working full-time, that person would have to earn \$22.54 an hour to afford a two-bedroom unit and \$18.69 to afford a one-bedroom unit.

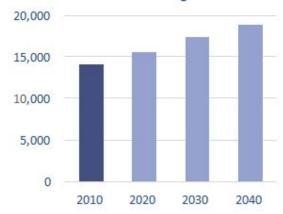
Minimum wage workers can't afford most rentals.



Future Housing Needs

The Weldon Cooper Center for Public Service produces population projections for all Virginia localities. According to their most recent estimates, the population in Williamsburg will grow to 15,586 by 2020, to 17,372 by 2030, and to 18,882 by 2040. These figures are consistent with the 2012-2016 ACS population estimate of 14,988 which shows about a 900 person increase over the 2010 Census estimate of 14,068.

Williamsburg will grow by several thousand over the coming decade.



Thus, over the next several years, the population of the city is likely to grow by an additional 600 individuals and in the following decade by another 1,800. Given the current average household size of 2.4 individuals, this

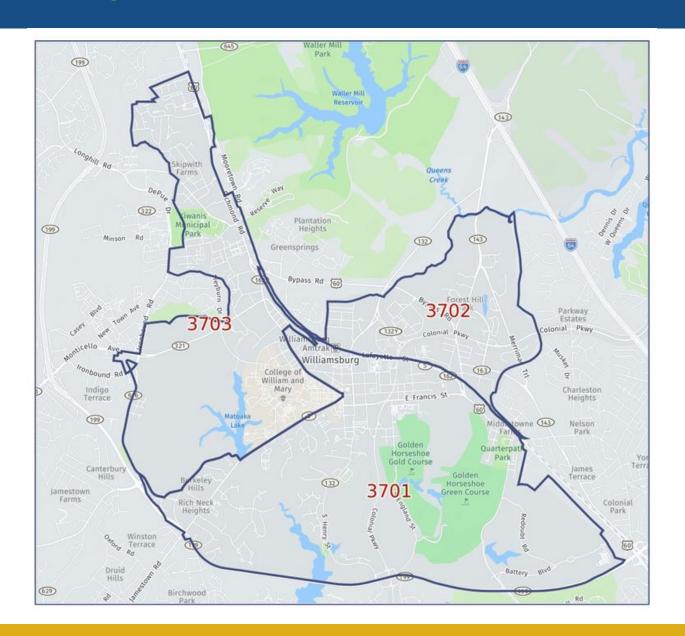
suggests the need for a total of 7,238 housing units by 2030. The 2012-2016 ACS estimates a total of 5,078 housing units leaving a deficit of 2,160 units that will be needed within the next 12 years to meet the increased demand for housing.

The estimate of 5.078 units does not include recent additions to the housing stock that have been made since 2016 including new homes in Quarterpath at Williamsburg and Capitol Landing Green on Capitol Landing Road and new rentals at the Flats in Williamsburg on York Street and Aura at Quarterpath. The City's 2013 Comprehensive Plan calculated that based on the available land and current zoning, Williamsburg has the potential to provide up to 400 additional single-family homes and up to 3,200 new multi-family dwelling units. Since the City completed the 2013 Comprehensive Plan, the City Council also approved the creation of 150 adaptive units at former motels which were not previously allowed under the zoning rules. However, the creation of the Colonial Williamsburg gun range in an area that was previously zoned for residential housing reduces the number of potential single-family homes under the current zoning rules by 60. Overall, this suggests a slight increase in potential housing in the city which would be more than

enough to accommodate the expected population growth in 2030 and beyond.

The City Council has approved a number of proposals in the past several years which show that such housing is in the process of being built. In addition to the recent construction of a large apartment complex and a number of townhouses in the Quarterpath at Williamsburg planned development, in 2018 the Council approved the construction of 96 townhouses in the High Street development and 240 multi-family units at the Midtown Row development at the intersection of Monticello and Richmond roads.

As discussed in the previous section on housing affordability, there continues to be a need for affordably-priced housing. The City's 2013 Comprehensive Plan notes that there is a 12-acre parcel in the Highland Park area which has the potential to be developed as an affordable-housing subdivision, particularly with a change in zoning to allow for increased density.



The City of Williamsburg is divided into three different tracts by the U.S. Census Bureau. Tract 3701 is the southernmost tract, bordered on the south by James City County. Its north-eastern border is Lafayette Street and its north-western border is the College of William and Mary. It includes the neighborhoods of Holly Hills, Walnut Hills, Indian Springs, Port Anne, The Oaks on Henry, Quarterpath, Braxton Court and the historic area. Tract 3702 is the north-eastern section of the city. bordered by Lafayette Street on the southwest edge and by York County to the north and east. It includes the neighborhoods of Capitol Heights, Pinecrest, Forest Hills, Brandywyne, Shellis Square, Wyndham, Barclay Square and Second Street. Tract 3703 is the northwestern section of the city, bordered on the south by Mill Neck Road and Jamestown Road, on the east by the railroad tracks and on the west by James City County. It includes the neighborhoods of College Terrace, Matoaka Court, Strawberry Plains, High Street, Longhill Woods, Skipwith Farms, Piney Creek and Claiborne.

Tract 3701, the southernmost tract, has the largest number of homes overall as well as the largest number of owner-occupied homes. Tract 3703 has almost as many homes as 3701, but fewer owner-occupied

hom Renters make up more of the stock in the northern cant tracts while the southern tract has the most owners.



homes. The north-eastern tract, 3702, has the smallest number of homes overall, but the highest number of rental units, just over 950 units compared to around 900 units in Tract 3702 and only 600 units in tract 3701. Note that these numbers do not include William and Mary's dormitories. If those units were included, Tract 3701 would likely have the highest number of "rental" units.

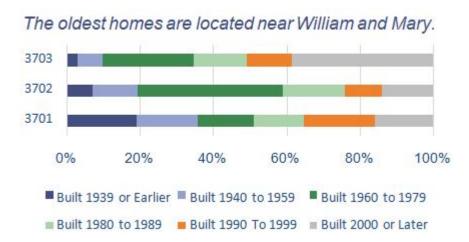
The housing stock in Williamsburg has grown by about 30 percent from just under 4,000 units in 1990 to over 5,000 units currently. Growth has not been even

across the three tracts. While they all started with roughly the same number of units in 1990, the north-eastern area of Williamsburg, tract 3701, has grown the slowest, by just about 200 units almost all of which are rental units. In contrast, both tracts 3701 and 3703 have increased by almost 500 units.



However, almost all of the growth in the tract surrounding William and Mary (3701) has been in owner-occupied units while the growth in the north-western tract is roughly equally divided between owner-occupied and rental units.

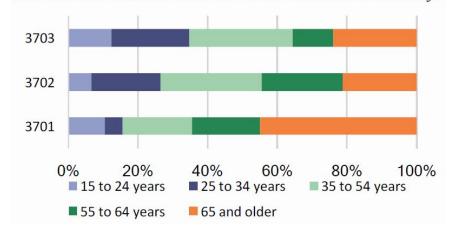
Tract 3701 has the oldest housing stock, with over 35 percent of its homes built prior to 1960 and only 20 percent built in 2000 or later. Tract 3702 also has a relatively old housing stock with 20 percent pre-1960 and over 50 percent built from 1960 to 1990. In contrast, over 50 percent of homes in tract 3703 was built in 1990 or later.



The age profile of householders varies significantly across tracts as well. While both Tract 3701 and 3703 have about the same percentage of households headed by 15 to 24 year olds, overall, the north-western area has the highest percentage of households below the age of 35. The area surrounding William and Mary has the oldest age profile with well over 60 percent of households headed by someone 55

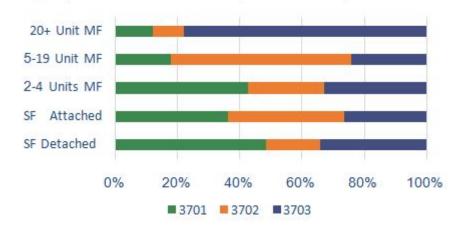
or older. The north-eastern area, Tract 3702, has the highest percentage of working age households—almost three-quarters of households are headed by someone between the age of 25 and 65. Note that these figures do not include the population living in on-campus housing. Were that to be included, the age distribution of Tract 3701 would skew younger.

The oldest residents also live near William and Mary.



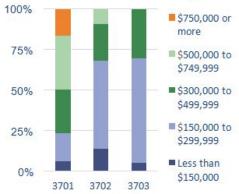
While all three tracts have some single-family homes as well as some type of multi-family housing, there are big differences in the prominence of different home types across the three tracts. For example, almost half of all of the single-family detached homes are in the southern tract surrounding William and Mary. This tract also contains a significant percentage of the attached single-family homes. Tract 3702 has the most mid-sized multi-family developments — those with 5 to 19 units, while Tract 3703 has both the most small multi-family developments and the most large multi-family developments.

Detached homes are concentrated near W&M with large apartments in the north part of the City.



Focusing on the owner-occupied houses, there is a significant difference in the value of the housing stock across Williamsburg. All of the homes in the \$750,000 and higher range and almost all of the homes in the \$500,000 to \$750,000 range are located in the area surrounding William and Mary. The most affordable homes – those that are worth \$150,000 or less – are relatively evenly distributed across the three tracts although there are not very many of them. While Tracts 3702 and 3702 have similar percentages of homes in the \$150,000 to \$300,000 range, there are more homes overall, and thus more homes in this range in Tract 3703. As discussed in the earlier affordable housing analysis, homes in this range should be affordable for a wide range of two-earner families.





Of course, not all homes are for sale. During the 2012-2017 period, the majority of sales in the Williamsburg MLS system came from the area surrounding William and Mary. This tract had both the largest and highest value homes. The north-eastern area of Williamsburg has both the smallest number of owner-occupied homes and the smallest number of sales. Tract 3703, which has the largest number of affordable homes also has the lowest median sales price of \$183,000. It also has a significant number of sales – 330 – and homes in this area sell the most quickly.

Mid-priced homes in the city sell the most quickly.

Tract	Number of Sales	Median Sales Price	Median Square Footage	Median Days on Market
3701	396	\$405,000	2,384	79
3702	175	\$260,010	1,932	82
3703	330	\$183,000	1,480	63

The north-western tract, 3703, has the most expensive rental units – a median rent of \$1,242. The tract near William and Mary, 3701, has a median rent of \$1,123 and the northeaster tract, 3702, has the lowest median rent of \$960. Controlling for the number of bedrooms, this pattern is repeated with Tract 3702 having the lowest rents for each size unit and 3703 typically having the highest. However, there are a small number of rentals in Tract 3701 that have a very high rent. These are likely larger single-family homes.

Tract 3702 has the largest number of rental units under \$1,000, while Tract 3703 has the largest number of units in the \$1,000 to \$2,000 range.

Rent per bedroom is lowest in the north-eastern tract and highest in the northwestern tract.



Some of the key findings of the study include:

- Since Williamsburg has been a center of activity for a long time, it has the oldest housing stock in the Historic Triangle and it is growing more slowly than James City County and Upper York. However, since 1990 it has experienced a 30 percent increase in housing stock and given future population projections, its housing stock is going to continue to grow. Based on the available land in the city and current zoning, Williamsburg can absorb this increase in population through increased housing supply.
- Williamsburg's households and housing units are smaller than those in James City County and Upper York County. While the median home value in the city is very similar to the value in the neighboring localities, the value per square foot is generally higher in Williamsburg. Additionally, Williamsburg has the highest percentage of homes in the \$500,000 and up range. Williamsburg stands out from its neighbors in some other respects, with a significantly higher percentage of rental units and a higher percentage of non-family and single person households. However, it looks relatively similar to other college and university towns in Virginia.

- The number of home sales has been increasing since 2010, although the median price has not. The market for homes in the lowest price range, under \$150,000 is the most active relative to the overall stock of homes. Overall, owner-occupied houses in the city are larger than the households that inhabit them, although the same does not hold true for rental properties. This suggests that some households are in houses that are larger than they need or want, perhaps because of difficulties in selling their homes and downsizing.
- Williamsburg faces some unique challenges in light of its significant student population. The presence of so many students in the 18 to 22 age group, as well as more mature students. increases the demand for rental housing in the city since on-campus housing is not adequate to meet the housing needs of the students. Students put upward pressure on the demand for and price of rental units in the city, forcing non-students to move further from the college area as shown by the low vacancy rate for rentals. Interestingly, despite this pressure on the demand for rental units, the area near William and Mary does not have the highest average rents nor are rents in Williamsburg higher than rents in the neighboring localities. However, across the city, rental rates

- have risen faster than the rate of inflation. Much of this is due to the addition of more rental units at the higher range of rents which is causing issues in terms of housing affordability.
- About 15 percent of Williamsburg's population is seniors, but about 30 percent of its housing units accommodate seniors. The difference is due to the significant number of students who are residents of the city but, since they live in on-campus housing, are not port of its housing stock. Most seniors, about 80 percent, own their own home. The age distribution of the city's home owners is aging as younger owners are not entering the market at the same rate as they did in the past, likely both to changes in lifestyle choices and financial conditions. James City County is experiencing this as well, although York County is not.
- Around 12 percent of households in the city headed by someone 25 or older (non-student households) are considered very-low income (less than \$20,000 in income) and another 20 percent are considered low income (between \$20,000 and \$35,000). A significant number of these households are costburdened – that is they spend more than 30 percent of their income on housing. However, there are cost-burdened households in every income

and age group. The supply of affordable homes for first-time buyers is much lower than the demand for such homes. To be able to afford the median home for sale in Williamsburg, households generally need at least two full-time wage earners. Even finding affordable rental units in the city can be difficult – for example, to afford a two-bedroom unit at "fair market rent" a household must have the equivalent of three full-time minimum wage workers.

Recommendations:

- Implement the recommendations from the Neighborhood Balance Committee.
- Implement the recommendations from the Workforce/Affordability Housing Work Group.

Appendix

One of the mainstays of demographic analysis is the decennial Census administered by the Census Bureau. The decennial census attempts to record data on all individuals living in the U.S. However, the questions that are asked are quite limited. Each household is asked to record the age, gender, and race of all individuals living in the household. With respect to housing information, the only information collected is the number of units in a structure, whether units are occupied or vacant, and whether they are owner-occupied or rented. More detailed housing and demographic data is collected through a survey. Prior to 2010, the survey was part of the decennial Census and was called the "long form." Approximately 1 in 6 households received the long form which asked additional individual data (level of education, employment status and type, disability status, income levels, etc.) as well as additional data on housing (gross rent, number of bedrooms, mortgage status, etc.).

Beginning in 2005 the American Community

Survey(ACS), which is also conducted by the Census Bureau, replaced the Census long form. The ACS is conducted monthly, rather than every 10 years and collects much the same information that was collected on the Census long form. The ACS is also a sample but has a much lower sampling rate - only 1 in 40 households is sampled every year. Because the sample is smaller the estimates from the ACS are noisier. Thus, for smaller geographies (census tracts, block groups, areas with less than 60,000 in population) estimates are only provided based on a 5-year moving average. For larger geographies, estimates are available based on a 3-year or 1-year average. Because the estimates are based on a sample, they are subject to error. The shorter time periods use fewer surveys to calculate the estimates and thus have larger errors. When interpreting the ACS data, one must take into account the time period the estimates cover. For example, the 2012-2016 ACS includes data from collected each month between the beginning of 2012 and the end of 2016 and thus represent an average over those 5 years.

Another important source for information about housing in the city is the Williamsburg Multiple Listing Service (MLS) data on home sales in the greater

Williamsburg area. The MLS data contains information on all home sales that are listed by brokers that participate in the MLS service. Sales that are made by private parties, such as sales by owners, are usually not listed in the MLS. Estimates of the percentage of total sales listed on the MLS range from 70 percent to 90 percent of all sales and depend on both the area and the market conditions. For this analysis we included all greater Williamsburg MLS sales from 2010 to 2017. The important thing to remember when using this data set is that not all sales are represented and in particular one might expect that very low priced houses would be less likely to be sold using a real estate agent both because the sellers may not be willing to pay an agent a commission and because agents may not be interested in selling houses that will result in only low commissions.